

**SUMMARY OF WORK**  
**Government Contracted Industrial Hygienist**  
**Evins Federal Building**  
**200 Administration Rd**  
**Oak Ridge, TN**  
**Matt Johnson - 7/19/2012**

**1. GENERAL:**

**PROJECT DESCRIPTION:**

Government Contracted Industrial Hygienist (GCIH) consultant will perform various services on behalf of the Government. The GCIH shall be licensed in the state of Tennessee and be a certified asbestos abatement inspector.

The purpose of the work of the GCIH consultant is to: Assure quality, resolve problems, and help prevent the spread of asbestos and lead contamination beyond the work area. In addition, the GCIH consultant's work includes performance of final inspection and testing to determine whether a space or a building area has been adequately decontaminated.

**Government Contracted Industrial Hygienist Responsibilities:**

- The GCIH shall be on-site at min 2 days per week and all major millstone dates. There shall be a on-site meeting with the GSA Project Manager and Contractor scheduled for once a week
- The GCIH shall ensure that all project activities are conducted in accordance with the requirements of the contract documents and state and federal guidelines. This shall include work site containment, contractor safe work practices and material disposal.
- To perform unannounced site visits to spot check overall compliance of work with contract documents. These visits may include any inspection, monitoring and testing inside and outside the work area and all aspects of abatement operations. Contact local building manager to have name put on DOE visitor list
- The GCIH shall keep a daily log of onsite observations concerning the contractor's activities, progress, and compliance. This log shall be legible and made available upon request at all times to the GSA Project Manager
- A weekly report shall be provided to the GSA Project Manager. This report shall be a summary of daily reports, testing, pictures, compliance issues, conflict mediation, project progression and project outlook
- For each asbestos abatement project, the GCIH shall prepare a comprehensive final report. The report shall be submitted to the GSA 60 working days following completion of final clearance air monitoring. The report shall contain the following items submitted in the following order, with each item labeled:

**END SECTION**

1. For clearance air samples, the location of the sample, date of sample, start and end times of sampling, sampling air flow rate, volume of air sampled, name and address of laboratory performing the analysis, and name and signature of the analyst.
2. When final air clearance monitoring samples are analyzed by a laboratory using transmission electron microscopy (TEM), a copy of the National Voluntary Laboratory Accreditation Program (NVLAP) certificate for airborne asbestos fibers analysis for the laboratory.
3. When final air clearance air monitoring samples are analyzed by Phase Contrast Microscopy (PCM) in a laboratory, a copy of Proficiency Analytical Testing (PAT) Program year-to-date performance report for the laboratory. The year-to-date performance report should be for the testing round completed closest to the completion of the project, but prior to the completion of the project.
4. When final air clearance air monitoring samples are analyzed by an analyst outside of a laboratory, a copy of the report of performance testing under the (Asbestos Analyst Report) AAR Program for the analyst for the testing round completed prior to the completion of the project, but not after the completion of the project.
5. Names, license numbers and current training certificates for asbestos abatement workers who conducted the abatement.
6. Name, address, and license number of asbestos abatement contractor.
7. Names, addresses, license numbers, and initial and current training certificates for the GEC who performed the duties of project manager and the contractor's supervisor(s).
8. Name, signature, and license number of each GEC who performed air sampling duties.
9. Log of negative pressure measurements taken by the contractor for contained areas. The readable tape from the monometer shall serve as the log.
10. Variance requests submitted to GSA and GSA's responses to those requests.
11. Locations, times and results of background and area air samples taken prior to and during the project.
12. A detailed description, diagram or blueprint indicating the location of ACBM abated locations of barriers, and locations of decontamination enclosures.
13. A detailed description of the project, including description of abatement methods employed, reasons for the project and for selection of the abatement methods, description of types and amounts of asbestos abated, and start and completion dates of the project.

#### **HOURS OF WORK:**

This will be a 24/7 project.

**END SECTION**

**SUMMARY OF WORK**  
**FULL ABATEMENT OF CONVECTORS, CEILINGS & Pipe Chase**  
**Evins Federal Building**  
**200 Administration Rd**  
**Oak Ridge, TN 37830**

Matthew Johnson - 7/9/2012

Reviewed; Mike Collins, Tennessee Certified Industrial Hygienist

**1. GENERAL:**

**PROJECT DESCRIPTION:**

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, MATERIALS AND SUPERVISION FOR the abatement of asbestos containing material in the fan coil units and pipe chases

Contractor shall also HEPA vacuum all horizontal surfaces above ceilings, including ceiling tiles, grid, support structure, light fixtures, HVAC diffusers / grids / vents, sheet metal ducts and hangers.

The Contractor shall be responsible for confirming the quantity, location, and accessibility of the asbestos-containing corrugated sheets, fan coil units, the sheet metal wrapped columns, and the ceiling plenum items

The work areas shall be returned to the government in full, identical condition. Any damage caused by the abatement (drop ceiling tiles, walls, carpet, furniture, etc.) shall be repaired by the contractor, at the Contractor's expense.

Abatement work shall be conducted in accordance with the Class I, II, III, or IV Methods of Compliance as required by 29 CFR 1926, 40 CFR 61 Subpart M, and Tennessee Department of Environment and Conservation, Asbestos Regulations, Chapter 1200.

The Owner will make available at the work site, water at hose bibs and 120 Volt AC at receptacles for the Contractor's use. Water proof safety lighting shall be provided by the Contractor where necessary for safe, adequate illumination.

All electrical equipment to be used inside the work areas should be powered from a UL approved Ground Fault Circuit Interrupter (GFCI). The Contractor shall not exceed the manufacturer's limits per GFCI. The Contractor shall make all necessary connections and shall restore the site connections to their original condition or better prior to project completion.

The Contractor shall ensure all energized or pressurized systems inside the work area have been locked out, tagged out or otherwise rendered safe by licensed and/or certified persons.

**REMOVALS:**

**THE FOLLOWING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE:**

- REMOVE AND PROPERLY DISPOSE OF ANY DEBRIS GENERATED DURING THE IMPLEMENTATION OF THIS PROJECT.
- CONTRACTOR SHALL PROVIDE GSA PROJECT MANAGER WITH DOCUMENTATION, CERTIFICATIONS AND MANIFESTS NECESSARY TO CONFIRM COMPLIANCE WITH STATE OF TENNESSEE AND FEDERAL REQUIREMENTS FOR ASBESTOS ABATEMENT ACTIVITIES AND HAZERDOUS WASTE DISPOSAL.

**END SECTION**

## **NEW WORK:**

### **1.01 ABATEMENT**

- Contractor shall be able to work crews 24 hours a day 7 days a week for 90 days to complete this project from the date of Notice to Proceed
- The Contractor and the GSA shall conduct a walk-through of the work area prior to beginning the abatement work to review existing conditions and ensure safe and practical conditions for the work to be implemented. Any damage to structures, surfaces, and equipment, which could be misconstrued as damage resulting from work shall be documented by the Contractor and submitted to the GSA at least ten days prior to start of work. Otherwise, any observed damage will be considered to be caused by the Contractor.
- Each work area shall be contained with critical barriers made of a double layer of 6 mm polyethylene sheeting deck to ceiling and covering all openings. Containment includes all surfaces such as ceilings, walls and floors
- All furniture, office equipment and miscellaneous items shall be HEPA vacuumed and removed from each affected office within the containment area prior to mounting the critical barriers. Miscellaneous desktop and work surface items shall be cleaned and boxed with labels and stored on-site with furniture items
- All items from previous paragraph shall be returned to original locations following the completion of encapsulation, cleaning and abatement
- Contractor shall use negative air machines capable to change the air in the space 4 times in an hour and keep a constant negative pressure differential of - 0.02" of water column. Manometers equipped with recordable strip charts shall be utilized at each containment area to document conformance with this requirement.
- The exhaust for the negative air machines shall exit the building at the nearest window opening within each containment area
- Decontamination and load out facility shall be contiguous to the containment area
- The contractor shall wet all ACM (Asbestos Containing Material) prior to removal to limit dust
- The contractor shall remove the fan coil cabinet shroud and filter and then abate all ACM within the area, including all surfaces within the convector housings, both active and blank
- The contractor shall remove all the sheet metal pipe chases. The pipe chases shall be abated, glue encapsulated and reinstalled. The pipe chases may be scuttled and replaced with new fabricated sheet metal at the contractor's discretion.
- The contractor shall HEPA vacuum all horizontal surfaces throughout containment areas following abatement of fan coil convector units and pipe chases. This shall also include above the drop ceiling (which includes tile, grid, lights, diffusers, etc.) and all air handling units
- Above the drop ceiling below return air plenums on floors Basement, Ground, 1, 2 & 3 shall be abated. The Basement floor drop ceiling with an open plenum will be included in this abatement

**END SECTION**

- The critical barriers shall only be removed once clearance samples are passing.
- All clearance testing shall be performed by a 3<sup>rd</sup> party industrial hygienist hired by the contractor and submitted to the GCIH for review and approval
- The office spaces shall be returned to the government in identical condition. Any damage caused by the abatement (drop ceiling tiles, walls, carpet, furniture, etc.) shall be repaired by the contractor. Damaged sheet metal pipe chases and convactor cabinets must be re-painted to match original color and finish
- The scheduling of work will be phased to start on the top floor and work down as each floor is completed
- The contractor will be required to submit a project schedule and update it weekly. The schedule will be submitted to GSA at a weekly meeting with the Construction Manager
- All work shall be performed in accordance with Tennessee Occupational Safety and Health Administration (TOSHA) regulations. All work and work areas covered in this contract will be subject to inspection by representatives of TOSHA to ensure that workers and employees are not subject to hazardous conditions or environment.
- The Contractor will be responsible for all applicable TOSHA Standards; EPA-NESHAPS regulations and the State of Tennessee Asbestos Management Regulations and Permits.
- The Contractor will be responsible for conducting personal monitoring on their employees during abatement activities.
- The Contractor will be responsible for conducting area air monitoring throughout the performance of abatement activities to assure that environmental controls are adequately controlling airborne fiber levels.
- Work areas in which abatement operations have been completed, shall be cleaned, starting at the ceiling and working down to the floors, by HEPA vacuuming and wet wiping. Upon satisfactory final clearance air sampling, and removal of polyethylene sheeting has been completed, a final cleaning (wet wipe) of all surfaces within the work area shall performed by the Contractor prior to removal of worksite access controls and re-occupancy inspection by the GSA.
- The contractor will tear down and dispose of all containment materials, systems and equipment. The Owner and Contractor will conduct a final walkthrough of the area to determine if the site is clean and no damages have occurred to the abatement area. For any damages that are found and resulting from the abatement process the responsible party will pay for the repairs.
- Clearance Air Monitoring: Clearance Air Monitoring shall be conducted by the Contractor's 3<sup>rd</sup> party industrial hygienist upon successful completion of a visual inspection and shall be in accordance with Federal and State of Tennessee Asbestos regulations.
- Contractor must be licensed as required by the State of Tennessee, Department of Environmental Protection, and Solid Waste Bureau for purpose of removal, enclosure, demolition and maintenance of structures or components
- The work shall not be considered complete until the asbestos materials identified herein have been abated, the areas cleaned, satisfactory clearance air monitoring completed, all asbestos contaminated waste has been properly disposed of, and all project close out documents have been received by the GSA.

**END SECTION**

References. In addition to the publications referenced in the Construction Contract Clauses, the following publications are referenced and are applicable to this project:

1. 29 CFR Part 1910.
2. 29 CFR Part 1926.
3. 40 CFR Part 61.
4. 40 CFR Part 763.
5. Tennessee Department of Environment and Conservation, Asbestos Regulations, Chapter 1200

C. Definitions. The following list of definitions is applicable to this project unless a Variance has been issued from the Office of the Regional Environmental Engineer.

1. "Abatement" means removal, encapsulation, enclosure and/or repair of asbestos containing materials.
2. "Adequately Wet" means sufficiently mix or penetrate with liquid to prevent the release of particulates.
3. "Aggressive Air Sampling Methods" means a method of sampling in which the person collecting the air sample creates activity during the sampling period to stir up settled dust during the collection of the air samples.
4. "AHERA" means the Federal Asbestos Hazard Emergency Response Act, 40CFR Part 763, Subpart E.
5. "Air Sampling Professional" means an individual that holds a valid license in the State in which the work is being performed, who is employed either directly or indirectly by GSA to conduct air sampling and sample analysis.
6. "Airlock" means a system for permitting entrance and exit with minimum air movement between an asbestos regulated work area where airborne asbestos fibers are expected to be encountered (the "dirty" side) and any other area (the "clean" side), consisting of two curtained doorways separated by a distance of at least three feet such that a person passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through of air from the "dirty" side to the "clean" side.
7. "Amended water" means water to which a surfactant has been added to improve water penetration.
8. "Area Air Sampling" means any form of air sampling or monitoring where the sampling device is placed at some stationary location.
9. "Asbestos" means the asbestiform varieties of serpentine (chrysotile), amosite, riebeckite (crocidolite), tremolite, anthophyllite, and actinolite as identified using polarized light microscopy.
10. "Asbestos Containing Material or ACM" means any material or product that contains more than 1% asbestos as determined by Polarized Light Microscopy (PLM).
11. "Asbestos Containing Building Materials or ACM" means Surfacing ACM, Thermal Systems Insulation ACM, Miscellaneous ACM, in or on the interior surfaces of a building.
12. "Asbestos Containing Waste Material" means any waste that contains commercial asbestos. This term also includes filters from control devices, bags or packages with commercial asbestos materials, waste from regulated asbestos work area projects, and objects contaminated with asbestos including disposable equipment, rags, and clothing.
13. "Asbestos Inspector" means an individual that holds a valid license in the State in which the work is being performed, to conduct asbestos building inspections.
14. "Asbestos Supervisor" means a licensed asbestos abatement contractor holding a valid license in the State in which the work is being performed.
15. "Asbestos Worker" means an individual that holds a valid license in the State in which the work is being performed who cleans, removes, encapsulates, prepares, encloses, erects, hauls, or disposes of asbestos materials or wastes.
16. "Authorized Visitor" means the GSA Property Manager or Project Manager, or any person designated by the GSA Property Manager or the Project Manager, the Regional

**END SECTION**

Environmental Engineer, and any representative of a regulatory or other agency having jurisdiction over the project.

17. "Background Levels" means the concentrations of airborne fibers as determined by phase contrast or transmission electron microscopy, in and adjacent to, the work areas, prior to the start of the work.
18. "Category I Non-Friable Asbestos Containing Material" means asbestos containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1 % asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy.
19. "Category II Non-Friable ACM" means any material, excluding Category I Non-Friable ACM, containing more than 1% asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
20. "Class I Asbestos Work" means activities involving the removal of Thermal Systems Insulation (TSI) and Surfacing ACM and PACM.
21. "Class II Asbestos Work" means activities involving but not limited to the removal of asbestos containing wall board, floor tiles and sheeting, roofing and side shingles, and construction mastics. Class II work does not include Class I work.
22. "Class III Asbestos Work" means repair and maintenance operations where ACM is likely to be disturbed.
23. "Class IV Work" means maintenance and custodial activities during which employees contact but do not disturb ACM or PACM and activities to clean up dust, waste, and debris from Class I, Class II, and Class III work.
24. "Clean Room" means a "clean side" area or room which is a structural part of the Worker Decontamination Enclosure System (WDES) with provisions for storage of workers' street clothes and protective equipment.
25. "Clearance Air Monitoring" means the employment of aggressive sampling methods with a volume of air collected to determine the airborne concentration of fibers upon conclusion of an asbestos abatement project.
26. "Commercial Asbestos" means any material containing asbestos that is extracted from ore and either has or has had value because of its asbestos content.
27. "Competent Person" means a person who is capable of identifying existing asbestos hazards in the workplace and in selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective actions to eliminate them. It also means a person who holds a valid asbestos license as a contractor's supervisor in the State where the work is taking place.
28. "Contained Area" means an enclosed work area in a building where negative air pressure and High Efficiency Particulate Absolute (HEPA) filtration are used to contain airborne fibers during removal, enclosure, or encapsulation of ACBM during an asbestos abatement project.
29. "Critical Barrier" means one or more layers of plastic sealed over openings into a work area or any similarly placed physical barrier, sufficient to prevent airborne fibers in a work area from migrating to adjacent areas.
30. "Curtained Doorway or 'Z'-Flap" means a device that consists of at least three overlapping sheets of plastic over an existing or temporary framed doorway. One sheet shall be secured at the top and left side, the second sheet at the top and the right side, and the third sheet at the top and the left side. The sheets shall have weights attached to the bottom to ensure that the sheets hang straight and maintain a seal over the doorway when not in use. Curtained doorways shall be installed at each end of each airlock and each end of each room of the Decontamination Enclosure Systems.
31. "Decontamination Enclosure System (DES)" means a series of connected rooms, separated from each other by air locks, used for the decontamination and exit from the work area. A Worker's Decontamination Enclosure System (WDES) shall be constructed for use by personnel entering and exiting the work area. An Equipment Decontamination Enclosure System (EDES) shall be constructed for cleaning and removing of containerized waste material from the work area. Both enclosure systems shall be erected and used on this project.
32. "Demolition" means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility as described by TOSHA. Demolition and renovation are not the same activities.

## END SECTION

33. "Disturbance" means activities that disrupt the matrix of asbestos containing material and PACM.
34. "Encapsulant" means a liquid material which can be applied to ACM and which temporarily controls the possible release of asbestos fibers from the material, either by creating a membrane over the surface (Bridging Encapsulant) or by penetrating into the material and binding its components (Penetrating Encapsulant).
35. "Encapsulation" means the treatment of ACM with a material that surrounds or embeds asbestos fibers and asbestos fiber bundles in an adhesive matrix that prevents the release of fibers.
36. "Enclosure" means the construction of an airtight, impervious, and permanent wall and ceiling between the ACM and the occupied space of the building.
37. "Equipment Decontamination Enclosure System or EDES" means a decontamination enclosure system designed for the controlled transfer of materials, equipment, and containerized waste into and out from the work area. The EDES shall consist of the following (from "dirty" side to "clean" side):
  - a. Curtained Doorway
  - b. Wash Room
  - c. Curtained Doorway
  - d. Airlock
  - e. Curtained Doorway
  - f. Holding Area
  - g. Curtained doorway
38. "Equipment Room" means a room or area on the "dirty side" which is part of the WDES with provisions for the storage or contaminated clothing and equipment that is intended for reuse. The equipment room shall be separated from the work area and from additional rooms in the WDES by air locks with curtained doorways.
39. "Facility" means any institutional, commercial, public, industrial, or residential structure, installation, or building, any ship, and any active or inactive waste disposal site.
40. "Facility Component" means any part of a facility including equipment.
41. "Fiber Release Episode" means any uncontrolled or unintentional disturbance of ACM resulting in visible emissions.
42. "Fixed Object" means a unit of equipment or building system component which can not be removed from the work area.
43. "Friable" means a material, when dry, that may be crumbled, pulverized, or reduced to powder by hand pressure. The term friable also applies to non-friable material that will intentionally become friable as a result of sanding, drilling, chipping, striking with an object (such as a wrecking ball), or demolition.
44. "Glovebag" means a manufactured device consisting of a plastic bag (constructed of a minimum of 6-mil thickness transparent plastic) with two attached inward projecting long-sleeved rubber gloves, one attached inward projecting water wand sleeve, an attached internal tool pouch, and an attached labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and that it contains the fibers that are released during the removal process.
45. "Glovebag Technique" means a method for removing friable ACM from heating, ventilation, air conditioning (HVAC) ducts, piping runs, valves, joints, elbows, and other non-planer surfaces.
46. "Government's Environmental Consultant or GEC" is an individual who is employed either directly or indirectly by GSA to provide third party observations, project coordination, and oversight on behalf of GSA on every aspect of an asbestos abatement project.
47. "HEPA" means High Efficiency Particulate Absolute.
48. "HEPA Filter" means a high efficiency particulate absolute filter capable of retaining 99.97 percent of particles (including fibers) that are greater than 0.3 micrometers in mass median aerodynamic equivalent diameter, with an efficiency designation of 100 in accordance with NIOSH 42 CFR 84, *Respiratory Protection Devices*.
49. "HEPA vacuum equipment" means vacuuming equipment with a high efficiency particulate absolute filter system.
50. "Holding Area" means a room or area on the "clean side" which is part of the EDES with provisions for the storage of containerized waste that has been decontaminated

**END SECTION**



- in the wash room of the EDES. The Holding Area shall be separated from the work area and from additional rooms in the EDES by air locks with curtained doorways.
51. "Intact" means that the ACM has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer bound with its matrix.
  52. "Leak-tight" means that solids or liquids cannot escape or spill out. Leak-tight also means dust-tight.
  53. "Miscellaneous Material" means interior building material on structural components, structural members, or fixtures, such as floor and ceiling tiles, and does not include Surfacing Materials or Thermal Systems Insulation.
  54. "Mini-Containment Area" means a contained and regulated area in which Glovebag Techniques are being employed.
  55. "Negative Air Pressure Equipment" means a portable local exhaust system equipped with HEPA filtration. The system shall be capable of maintaining a constant, low velocity airflow from asbestos abatement work areas to the outdoors, thereby creating a negative pressure differential between the work area and the remaining areas of the building.
  56. "Negative Initial Exposure Assessment" means a demonstration by the contractor that by using the specific work procedures to be employed on the project, employee exposure during the project is expected to be consistently below the PEL.
  57. "NESHAP" means the National Emission Standards for Hazardous Air Pollutants (40 CFR 61).
  58. "Nonfriable Asbestos-Containing Material" means any material containing more than 1% asbestos as determined using the method specified in Appendix E, Subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy, that, when dry, may not be crumbled, pulverized, or reduced to powder by hand pressure.
  59. Office of the Regional Environmental Engineer" means the GSA Environmental Engineer for Region 5, assigned to the Fire Protection and Safety Branch or an individual or company designated by the Environmental Engineer.
  60. "Operations and Maintenance" means a program of work practices to maintain friable and nonfriable ACM in good condition, to provide for the clean-up of asbestos previously disturbed or damaged, and to prevent further releases by minimizing and controlling disturbances and damage to ACM.
  61. "OSHA" means the Occupational Safety and Health Administration.
  62. "Outside Air" means air from outside of the work area.
  63. "Personal Air Monitoring or Exposure Monitoring" means a method used to determine employees' exposure to airborne fibers through the collection of air samples from the breathing zone of an individual in the work area. Personal Air Monitoring must be conducted in accordance with 29 CFR 1910.1001 and 1926.1101.
  64. "PACM" means Presumed Asbestos Containing Material.
  65. "Permissible Exposure Limit (PEL) for asbestos fibers, as expressed as an eight-hour Time Weighted Average (TWA)" means the concentration at which no employee shall be exposed to. The PEL is 0.1 fibers per cubic centimeter as determined by Phase Contrast Microscopy.
  66. "Presumed Asbestos Containing Material" means thermal systems insulation and surfacing material found in buildings constructed no later than 1980 unless that material has been determined to NOT contain asbestos based on an adequate number of samples having been analyzed using the method specified in Appendix E, Subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy.
  67. "Project" means removal, encapsulation, enclosure, or repair of more than three linear feet, three square feet, or one cubic foot of ACM.
  68. "Regulated Asbestos Containing Material (RACM)" means:
    - a. Friable Asbestos Containing Material; or,
    - b. Category I Non-friable ACM that has become friable; or,
    - c. Category I Non-friable ACM that will be subject to sanding, grinding, cutting, abrading; or,
    - d. Category II Non-friable ACM that has a high probability of becoming damaged or friable in the course of renovation or demolition operations.
  69. "Regulated Area" means an area established by the contractor to demarcate areas where Class I, Class II, and Class III asbestos work is being conducted. It also means any areas where debris and waste from such asbestos work accumulate; and a work area within which airborne fiber concentrations either exceed or there is a reasonable possibility that they may exceed the permissible exposure limit.

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70. "Remote Decontamination Enclosure System" means a decontamination enclosure system which is not connected to the contained work area.
71. "Removal" means the intentional detachment of any asbestos-containing materials from surfaces or components of a building or taking out building components.
72. "Renovation" means altering a facility or one or more facility components in any way, including the stripping or removal of Regulated Asbestos Containing Material from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.
73. "Repair" means rewinding or taping damaged pipe or boiler (or similar vessel) insulation and patching of surfacing material.
74. "Resilient Floor covering" means asphaltic and vinyl floor tiles, sheet flooring materials, and their associated adhesive mastics.
75. "Response Action" means a method with procedures including removal, encapsulation, enclosure, repair, operations and maintenance, and clean-up after an accidental release, that protects human health and the environment from friable ACBM.
76. "Secure Separation Barriers" means a rigid barrier constructed of ½ inch minimum thickness plywood, gypsum board, or similar sheathing material with sufficient framing to support the barrier designed to prevent the possible access by building occupants into areas where project activities will occur. A Secured Separation Barrier **shall not** be used as a containment area barrier.
77. "Separation Barrier" means a rigid barrier that is erected in a building space to reduce the volume of a work area, such as erecting a barrier along the perimeter of a series of rooms in order to remove materials from windows without making the entire room a work area. This type of Barrier SHALL NOT be used to separate occupied areas of the building from the work area. This type of Separation Barrier shall be of ½ inch minimum thickness plywood gypsum board or similar sheathing material with suitable framing to support the Separation Barrier. The seams and edges of the Separation Barrier shall be caulked and the work area side of the Separation Barrier shall be covered with two layers of six-mil plastic sheeting equivalent.
78. "Shall" means the stated provision is mandatory.
79. "Shower Room" means a "clean side" area or room separated from the Clean Room and from the Equipment Room by airlocks with curtained doorways, which is a structural part of the Worker Decontamination Enclosure System (WDES) with hot and cold running water controllable at the tap and arranged for complete showering during decontamination.
80. "Shut Down and Lock Out Power" means to switch off every electrical circuit breaker serving power or lighting circuits which run to, or through, the work area. Lock the electrical panel or door with separate locks.
81. "Staging Area" means a "dirty side" area separated from the Wash Room by an airlock with curtained doorways, which is adjacent to Equipment Decontamination Enclosure System (EDES) designated for the temporary storage of containerized waste prior to removal from the work area.
82. "Structural Member" means any load supporting member of a facility, such as beams and load supporting walls, or any non-load supporting member such as ceilings and non-load supporting walls.
83. "Surfactant" means a chemical wetting agent that, when added to water, will improve the penetration characteristic of the water in order to reduce fiber release.
84. "Surfacing Material" means material that is sprayed, troweled-on, or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing on structural members).
85. "TOSHA" means the Tennessee Occupational Safety and Health Administration.
86. "Thermal System Insulation (TSI)" means insulation material applied to pipes, fittings, boilers, breechings, vessels, tanks, ducts, or other structural or mechanical components, to prevent heat gain or loss, reduce noise, control condensation, or any other purpose including decorative.
87. "Visible Emissions" mean any emissions containing particulate, airborne or as tracked dust, that are visually detectable with out the aide of instrumentation.
88. "Wash Room" means a "dirty side" area separated from the Staging area of the work area by a curtained doorway, which is a structural component of the Equipment Decontamination Enclosure System (EDES) designated for cleaning of waste containers, equipment, and any other items, except for personnel, from the work area.

**END SECTION**

89. "Wet Cleaning" means the process of eliminating residual asbestos fibers from surfaces and objects by using cloths, mops, and other cleaning tools which have been dampened with water. After cleaning, the cloths, mops, and other cleaning tools must be disposed as Asbestos Containing Waste Material.
90. "Work Area" means the designated rooms, spaces, or areas where an aspect of an asbestos abatement project is being conducted.
91. "Worker Decontamination Enclosure System or WDES" means a decontamination enclosure system designed for the decontamination of personnel exiting the work area. The WDES shall consist of the following (from "dirty" side to "clean" side):
- a. Curtained Doorway
  - b. Equipment Room
  - c. Curtained Doorway
  - d. Airlock
  - e. Curtained Doorway
  - f. Shower Room
  - g. Curtained doorway
  - h. Airlock
  - i. Curtained Doorway
  - j. Clean Room
  - k. Curtained Doorway

## 2.0 ASBESTOS ABATEMENT SUBMITTALS

### 2.1 SUBMITTALS

#### A. Qualifications.

1. Contractor shall submit evidence of satisfactory completion of five projects similar to scope and size to this project that were completed in the last 24 months.
2. Contractor shall submit professional references for projects completed in federal buildings in the last 24 months.
3. Contractor shall submit the names and a list of relevant experience for the proposed Site Supervisor, Competent Person, and workers that are proposed for this project.
4. Contractor shall submit a copy of the current asbestos license, asbestos training documentation, and respiratory protection program documentation (training, medical professional opinion, and fit testing) for each of the individuals listed in item 3, above.

B. Asbestos Abatement Action Plan. Contractor shall prepare and submit an Asbestos Abatement Action Plan (Plan). The Plan shall be submitted to the GSA Property Manager, the GSA Project Manager and to the GSA Regional Environmental Engineer and the Government's Environmental Consultant for review and approval at least **30 calendar days prior to the start of the work**. No work shall be allowed until the Plan has been approved. The Plan shall include drawings and narratives, sufficient in detail to demonstrate and indicate the following:

1. The specific areas of work in the building.
2. Areas of the building which will be occupied during the work.
3. Proposed personal protective equipment to be utilized during the performance of the work.
4. Locations of critical barriers.
5. Delineation of each regulated area.
6. Location of regulated area signage.
7. List of emergency service providers, contact phone numbers, and directions to nearest hospital, to be posted at work site entry.
8. Location of Decontamination Enclosure Systems.
9. Location of waste accumulation.

**END SECTION**

10. Route of workers from outside the building, into the work area, from decontamination to break areas and to out of doors.
11. Location of waste dumpster.
12. Route of containerized waste containers from the work area to out door.
13. Location of mini-enclosures (if applicable).
14. Location of remote decontamination enclosure system (if applicable).
15. Location of negative air machine exhaust points and path of exhaust ducts.
16. Completion of a GSA Notification Form.
17. A narrative sequencing plan with a detailed schedule clearly indicating the various aspects of the work.
18. Asbestos abatement air monitoring plan.
19. A Contingency Plan shall be prepared and included by the Contractor for emergencies including fire, accident, power failure, heating or cooling, negative air system failure, respirator supplied air system failure, or any other event that may require modification of the work area isolation procedures. Include in the plan specific procedures for decontamination or work area isolation, safe exiting and the need for medical attention in the event of an emergency.

C. Sample Submittals. Contractor shall submit for review and approval **at least 30 calendar days prior to the scheduled start of the work**, samples of encapsulants, solvents, adhesives, and any other chemical product that is proposed to be used on this project. No products may be brought into the building until approved by either the GSA Project Manager, the GSA Property Manager, the GSA Regional Environmental Engineer, and Government's Environmental Consultant or as specified elsewhere in this document. The samples shall be in their original containers and shall be accompanied by their Material Safety Data Sheets.

D. Additional Submittals. **At least 10 calendar days prior to the commencement of any work**, the contractor shall submit the following information to the GSA Property Manager, the GSA Project Manager, the GSA Regional Environmental Engineer, and the Government's Environmental Consultant for review and approval prior to starting the work:

1. Documentation that arrangements have been made for the transport and disposal of waste generated at this project and the name and location of the disposal sites.
2. Documentation that each worker and supervisor is licensed in the State where the work is being performed.
3. Drawings for layout and construction details for Decontamination Enclosure Systems and barriers for isolation of the work area.

E. Contractor shall provide the following information during the asbestos work:

1. Results of air monitoring from the previous 24-hour period.
2. Differential air pressure readings for each containment area.
3. Asbestos containing waste shipment records.
4. Job progress reports detailing the abatement/mitigation activities, including a review of progress with respect to previously established schedules, problems, and actions taken, injury reports, and equipment breakdowns, if applicable.
5. Copies of worksite entry logs showing the name, date and time for worker and visitor access to the work area.
6. Logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls.

F. At the completion of the project. The contractor shall submit the following:

1. Contractor's report detailing the work that was completed and the procedures that were used.
2. Contractor's air sampler's report summarizing the results of all exposure monitoring that occurred.
3. A complete set of the contractor's daily logs and waste shipment records.
4. Negative air machine strip charts.

**END SECTION**

## 2.2 ALTERNATE PROCEDURES AND VARIANCES

A Variance to the Work Practices may be requested by submitting a written proposal to the GSA Environmental Engineer a minimum of 20 calendar days before the commencement of work. The written proposal shall include a detailed description of the procedure(s) to be used in lieu of the requirements described herein. The Environmental Engineer will notify the applicant in writing of its decision to either grant or deny the variance within 20 calendar days of receipt of the request.

## 2.3 NOTIFICATION FORM

Contractor shall complete and submit the following Notification Form **at least 10 working (14 calendar days)** to the Project Manager, the Property Manager, and to the Regional Environmental Engineer.

### QUALITY ASSURANCE:

The quality of materials and finishes shall be equal to or exceed existing.

### SUBMITTALS:

Prior to contract award, the contractor must submit to the Contracting Officer for approval, manufacturer data and MSDS for all products and materials proposed for this project.

The contractor shall provide to the Contracting Officers Representative (C. O. R.) no later than ten days prior to contract start date the telephone numbers, names, dates of birth, social security numbers and addresses of all employees, supervisors and subcontractors working on this project.

DOE shall perform background checks on all personnel and supervisors prior to admission into the work site.

### WARRANTY:

In addition to any manufacturer's warranty, all materials and equipment provided shall be warranted against defect in material and workmanship for a period of one (1) year from the date of final acceptance by the government.

### PRODUCTS:

All products and materials proposed for this project shall be commercially available first line products of a reputable manufacturer acceptable to the contracting officer (C.O.).

### HOURS OF WORK:

This will be a 24/7 project.

Site elevators may be used during preparation activities, prior to the start of any asbestos abatement work, only. There are four elevators located within the building. Elevator E-1 will be designated for use by the Contractor. The Contractor will be responsible for installing protective barriers within the elevator to protect existing finishes. Contractor will be responsible for returning the elevator to service after the completion of the project in identical condition as to when the project started.

**END SECTION**

Contractor will be responsible for repairing any damage to building finishes caused by their work. The Contractor will have the opportunity to inspect the building finishes within the building and document the condition prior to the start of work.

**CLEAN UP AND DEBRIS REMOVAL:**

The contractor shall be responsible for the removal of all trash and debris generated during this project per the applicable regulations. Following removal of containment, areas of work will be swept, vacuumed, and policed. The contractor shall be responsible for the thorough cleaning of the space prior to final acceptance by the government. All areas of the work including traffic areas shall be protected from dirt, dust, debris, spills, and splatters during the project.

**END SECTION**



GSA Southeast Sunbelt Region

**Joe L. Evins Federal Building  
Oak Ridge, TN**

**Project Update: May 13, 2013**

**GSA Contacts**

Project Manager: Rick Hilligoss

Communications Lead/ Property Manager: Jonathan Sitzlar

Asset Manager: Joseph Somers

Project Sponsor/Service Center Director: Dennis Gentry



**BACKGROUND**

During GSA's annual asbestos inspection (June 2012) it was discovered that Asbestos Containing Material (ACM) had fallen from adjacent walls into the building's horizontal HVAC convectors. The Department of Energy (DOE) evacuated the facility while GSA, DOE, and the U.S. Public Health Service determined the possible hazards and corrective measures to be taken. DOE elected to keep employees out of the facility until the hazard is mitigated; they sought and were granted a stoppage of rental payments. Loss of revenue to GSA is \$120,000.00 per month. Estimated Revenue loss total is \$1.26m.

Determination: The Nashville Service Center Asset Business Team (ABT) selected the option to abate all ACM located within the active convector casings (contains fan coils) and adjacent inactive casings. GSA would hire an independent State of Tennessee certified CIH to act in GSA's behalf and assist in the project management. Project ECC \$3,058,236.00

Prior to the project being executed a full inspection of 122 areas of the building was conducted by DOE and no ACM was indicated during this testing. Furthermore, no ACM was found during subsequent testing within the building either during or after the project's completion.

**Project Scope:** Remove all ACM in active and inactive HVAC casings and vertical chases, clean all affected areas along with above the ceiling, ceiling tiles, light fixtures and all the building's air handlers. Repaint surfaces impacted and clean horizontal surfaces. Personnel and space air sampling/testing shall be performed during abatement and for final clearance of the facility.

**Project Summary:**

**Acquisition**

Acquisition Method: Open Market, Negotiated

Award Amount- \$2,497,925.00

Project Award Date- November 27, 2012

Notice To Proceed Date- January 15, 2013

Completion and Release Date- April 15, 2013

**Tenants**

DOE Square Feet: 157,931 GSF

Congressman Fleischmann Square Feet: 851 GSF

**Rental Impact of Project**

Monthly Rent to GSA: \$120,605.18

Total Rental Stream Loss June 2012-May 2013: \$1,326,656.98

**Other Project Costs**

Abatement IH: \$80,000

Relocation Back Costs for DOE and Congressman's Office: \$128,000 (Estimated)

Boxes for Relocation Out: \$6,000

Temporary Locking File Cabinet Rental \$6,810

COOP Operational Set Up Costs: \$1,396.81

PHS & Doctor Visitations - \$15,000 (Approximate)

**STATUS**

A town hall meeting was conducted on April 3, 2013 to meet with all DOE employees to discuss the project. Members of GSA's project team (Project Mgr, Property Manager, CIH & others), GSA's State certified independent CIH, the Contractor and his CIH along with a representative of the U.S. Public Health Service were in attendance to discuss the project and answer employee questions.

All ACM has been removed in accordance with the SOW. The contractor recently re-cleaned all affected areas due to having missed removing the fan coil filters and failure to properly clean a few convectors (these are house-keeping issues, no ACM involved) and has successfully retested all spaces before the facility was released back to DOE on April 15, 2013.

DOE is resisting accepting the space and is also resisting coordinations with GSA-PBS regarding their move coordination and relocation back into the building. DOE insists that GSA insure that all horizontal surfaces above the ceiling be wet cleaned and HEPA vacuumed which is far in excess of the SOW for the project that has just been completed.

They are also concerned about the possibility of disturbing any other encapsulated ACM within the building as part of any additional construction projects that they may elect to pursue on their own.

**NEXT STEPS / RISKS**

**Next Steps:** GSA-PBS received a letter from DOE on April 25, 2013 directed at the PBS Regional Commissioner (RC), John Smith. Multiple communications have already been directed to the project team members (meetings, emails, etc.) and the DOE personnel have stated that they have not been satisfied with the GSA responses thus far. GSA-PBS has coordinated an onsite meeting between a member of the PBS Regional Management Team (Jeneil Hunt, Deputy Director, Property Disposal Division) and DOE management to get this issue resolved. The meeting is supposed to occur on 16 MAY 2013. Jonathan Sitzlar and Dennis Gentry of the Nashville Service Center will also attend this meeting.

The project team has conferred with GSA Regional Counsel (4L) who has affirmed their position that the cleaning that was done is in accordance with the project abatement SOW. Additionally, DOE reviewed and approved the project SOW prior to the contract for abatement being solicited and awarded.



A final letter from the government contracted industrial hygienist (GCIH) giving the building a clean bill of health with regard to the ACM remediation project is due to GSA from the contractor. An additional comprehensive report detailing the testing that was performed to verify that the building has no ACM related health hazards is also being finalized by another contracted industrial hygienist connected with this project. All pending reports have been received from FOH and the vendor and the Vendor's contracted Industrial hygienist. This package includes letters from the hygienists stating their opinions of the work that was performed based on their observations as well as test data supporting their conclusions.

Re-instatement of rent payments has resumed as of May 1, 2013 with rent billing resuming on May 15, 2013. GSA has identified a move COR and contracting officer to acquire a move contract to physically relocate DOE back into the facility upon receipt of the agency's relocation plan.

**Risks:** The lease for temporary swing space for DOE expires on July 31, 2013. It is possible for DOE to be moved by this date but only if GSA receives their full cooperation in pursuing the move process. GSA needs approximately 30 days to perform this moving services acquisition properly and an estimated 3 weeks to perform a move of this magnitude while the agency still performs many of its business functions. DOE has provided GSA with the general phasing and timing of their move requirements but have not yet provided specific dates for when the move is to be initiated.

The agency will be billed by GSA for starting on May 15, 2013 for both their space in the Joe L. Evins building and their temporary leased space until the temporary space is properly vacated.